

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 July 2001 (12.07.2001)

PCT

(10) International Publication Number
WO 01/50743 A1

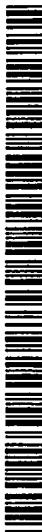
- (51) International Patent Classification⁷: H04N 5/445 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (21) International Application Number: PCT/US01/00308
- (22) International Filing Date: 4 January 2001 (04.01.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/174,443 4 January 2000 (04.01.2000) US
- (71) Applicant: UNITED VIDEO PROPERTIES, INC.
[US/US]; 7140 South Lewis Avenue, Tulsa, OK 74136
(US).
- (72) Inventor: REICHARDT, M., Scott; 7735 S. Memorial Drive, #3303, Tulsa, OK 74133 (US).
- (74) Agents: PIERRI, Margaret, A. et al.; Fish & Neave, 1251 Avenue of the Americas, New York, NY 10020 (US).

Published:

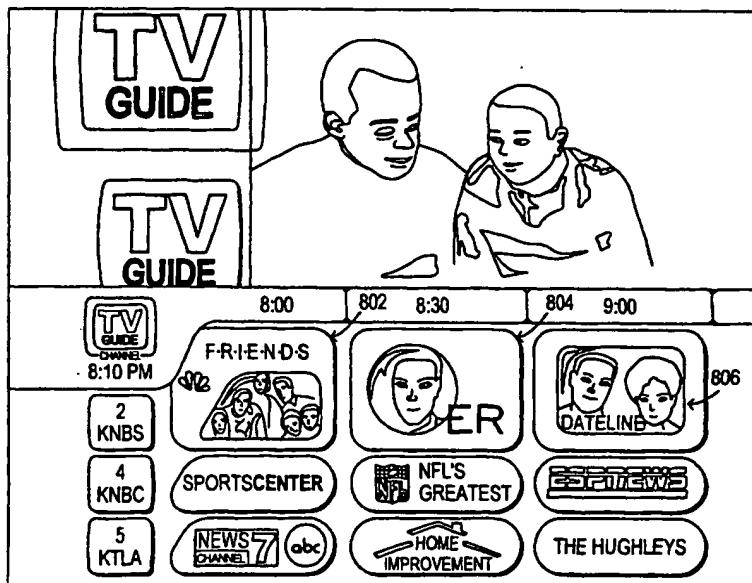
— With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: INTERACTIVE PROGRAM GUIDE WITH GRAPHIC PROGRAM LISTINGS



WO 01/50743 A1



(57) Abstract: Electronic program guides in which program listings may be graphically presented and in which sponsors and celebrities of those programs may be identified are provided. The electronic programs guides may be passive television program guides, interactive television program guides, and/or on-line television program guides. Television show text information, logos and/or trademarks, celebrity images, affiliation indicators, and advertisements may be present in the program listings to enhance the electronic program guides.

INTERACTIVE PROGRAM GUIDE
WITH GRAPHIC PROGRAM LISTINGS

Cross Reference To Related Application

This application claims the benefit of United States Provisional application No. 60/174,443, filed January 4, 2000.

Background of the Invention

This invention relates to electronic program guides, and more particularly, to promotional techniques for program guides.

Electronic program guides are used to provide program listings information to television viewers. Program listings information may include program titles, scheduled broadcast times and channels, program descriptions, etc.

One form of electronic program guide is the passive television program guide. Passive television program guides, such as the TV Guide Channel, are typically provided by cable system head-ends or other television distribution facilities on a dedicated television channel. Passive program guides may provide program listings in the form of an automatically scrolling or paged list. Viewers may access the listings of the passive program guide by tuning to the

- 2 -

appropriate dedicated television channel with a standard television or set-top box.

Another form of electronic program guide is the interactive television program guide. Interactive television program guides, such as TV Guide Interactive and Gemstar Guide Plus, are typically implemented on set-top boxes or other user television equipment with suitable processing circuitry. Users typically interact with such interactive television program guides using a remote control. Features that are often offered by interactive television program guides include the capability to set favorite channels or programs, the capability to set reminders for programs of interest, and the ability to establish parental controls.

Yet another form of electronic program guide is the on-line television program guide. On-line television program guides, such as TV Guide Online, allow users to access program listings information over the Internet using a web browser or similar interface. When using these guides, users frequently may click on program titles within the guides to view additional information such as a detailed program description.

All of these variations of electronic program guides provide program listings information to their viewers or users in the form of text. This can be seen in passive products such as the TV Guide Channel or Americast's passive program guide, both of which feature a text-based scrolling grid of listings. Text-based listings are also seen in Internet guides such as the GIST on-line program guide and the Click TV on-line program guide. Text-based listings are also seen in

- 3 -

interactive program guides such as Starsight and Americast interactive program guides.

Nevertheless, there is a need for a more aesthetically pleasing and eye-catching methods for 5 presenting electronic program guides. Preferably these methods would incorporate program listings that are easy to identify and that indicate relationships between sponsors and celebrities of those programs.

It is therefore an object of this invention 10 to provide an electronic program guide that presents program listings as graphical images that can meet these needs.

Summary of the Invention

This and other objects of the invention are 15 accomplished in accordance with the principles of the present invention by providing electronic program guides in which program listings may be graphically presented and in which sponsors and celebrities of those programs may be identified. The electronic 20 programs guide may be passive television program guides, interactive television program guides, and/or on-line television program guides. Television show text information, information icons, graphic logos and/or trademarks, celebrity images, affiliation 25 indicators, and advertisements may be present in the program listings to enhance the electronic program guides.

Further features of the invention, its nature and various advantages will be more apparent from the 30 accompanying drawings and the following detailed description of the preferred embodiments.

Brief Description of the Drawings

- 4 -

FIG. 1 is a schematic diagram of program guide provider equipment, a communication link, and program guide display equipment that may be used in accordance with some embodiments of the present
5 invention.

FIG. 2 is an illustration of an electronic program guide display screen that may be presented in accordance with some embodiments of the present invention.

10 FIG. 3 is an illustration of an electronic program guide display screen showing text information and information icons that may be presented in accordance with some embodiments of the present invention.

15 FIG. 4 is an illustration of an electronic program guide display screen showing an information tray that may be presented in accordance with some embodiments of the present invention.

20 FIG. 5 is an illustration of an electronic program guide display screen showing program information with colored backgrounds that may be presented in accordance with some embodiments of the present invention.

25 FIG. 6 is an illustration of an electronic program guide display screen showing program logos and affiliation indicators that may be presented in accordance with some embodiments of the present invention.

30 FIG. 7 is an illustration of an electronic program guide display screen showing celebrity images that may be presented in accordance with some embodiments of the present invention.

- 5 -

FIG. 8 is an illustration of another electronic program guide display screen showing celebrity images that may be presented in accordance with some embodiments of the present invention.

5 FIG. 9 is an illustration of an electronic program guide display screen showing affiliation indicators and an advertisement button that may be presented in accordance with some embodiments of the present invention.

10 FIG. 10 is an illustration of an electronic program guide display screen showing promotion buttons that may be presented in accordance with some embodiments of the present invention.

15 FIG. 11 is an illustration of an electronic program guide display screen showing a promotion button and an advertising button that may be presented in accordance with some embodiments of the present invention.

20 FIG. 12 is an illustration of an electronic program guide display screen showing a promotion button that may be presented in accordance with some embodiments of the present invention.

Detailed Description of the Preferred Embodiments

Turning first to FIG. 1, a system 100 for presenting an electronic program guide is illustrated. System 100 may be used to implement any form of electronic program guide, including a passive television program guide, an interactive television program guide, and an on-line television program guide. As shown, system 100 may include program guide provider equipment 120, a communication link 130, and program guide display equipment 140.

- 6 -

When implemented as a passive television program guide, system 100 may be implemented with equipment 120 being a computer and video generator at a cable head-end, link 130 being a one-way cable

- 5 television distribution system, and equipment 140 being a television. Program guide data then may be formatted by the computer, converted to a video signal by the video generator, transmitted through the cable television distribution system, and then received by
10 and displayed on the television.

When implemented as an interactive television program guide, system 100 may be implemented with equipment 120 being a server at a cable head-end or other location, link 130 being a one-way or two-way

- 15 cable television distribution system, and equipment 140 being an advanced set-top box and a television. Program guide data may then be transmitted from the server through the cable television distribution system, received by the set-top box, displayed on the
20 television, and interacted with by a user using a remote control of the set-top box.

When implemented as an on-line television program guide, system 100 may be implemented with equipment 120 being a server, link 130 being a computer

- 25 network that may include the Internet, and equipment 140 being a computer that is capable of communicating with the server in equipment 120. Program guide data may then be formed by the server into a web page, transmitted by the server through the computer network
30 to the computer, displayed on a computer monitor connected to the computer to the user, and interacted with by the user using a mouse and/or keyboard attached to the computer.

- 7 -

Obviously, many variations of suitable equipment may be used to provide an electronic program guide in accordance with the present invention without departing from the spirit and scope of the invention.

- 5 For example, the present invention may be implemented in a satellite television system.

Turning to FIG. 2, one embodiment of an electronic program guide display 200 in accordance with the present invention is illustrated. As shown, 10 program guide display 200 may include a top half 202 and a bottom half 203. Top half 202 may include promotional videos, advertisements, graphics, text, icons, and/or any other suitable content. Bottom half 203 may include a time bar 204 that indicates the 15 current time and time slots for television programs, and an information area 206 that indicates information relating to television programs that are on in those time slots. The content provided in top half 202 of display 200 may or may not correspond to the 20 information relating to television programs that is provided in bottom half 203 of display 200.

As illustrated in FIG. 3, time bar 204 preferably includes a clock 302 and time slots 304. Time bar 204 may also include a guide provider logo 303 25 to indicate to the viewer the identity of the provider of the guide. Time slots 304 provide an indication of when programs were playing, are playing, and/or will be playing. Time slots 304 may be implemented in any suitable delineation of time segments. For example, 30 time slots 304 may be implemented in half-hour segments (e.g., one segment may read 8:00, the next may read 8:30, and another may read 9:00). The time slots may

- 8 -

also indicate when the times indicated by the time slots are in the past.

As shown, information area 206 may include program listings for the electronic program guide. In 5 some embodiments, the program listing may be displayed as buttons 306. Buttons 306 may include text information pertaining to each program, such as the title of the program, a description of the program, names of actors in the program, etc., and informational 10 icons that indicate the rating of the program (e.g., PG, G, TV-13, etc.), whether the program is in stereo, whether the program is closed-captioned, whether the program is in Dolby, whether the program is broadcast in High-Definition Television (HDTV), etc. Buttons 306 15 may be color coded to indicate what category of show each represents. Each button 306 may be aligned with a channel indicator 308 to indicate what channel a corresponding program is on. Each channel indicator 308 may indicate the channel number, call letters, 20 name, logo, and/or any other suitable indicator of the channel indicator. Each channel indicator 308 may also be in a similar style to guide provider logo 303.

Although the program listings are shown herein as being displayed in buttons 306, program 25 listings may be displayed in any suitable graphical element, such as a grid cell.

An information tray 402 may also be included in information area 206 as shown in FIG. 4. Information tray 402 may contain a legend 404 that 30 indicates the scheme used for color-coding buttons 306, if any. For example, legend 404 may indicate that buttons 306 corresponding to sports programs are indicated in green and that buttons 306 corresponding

- 9 -

to movies are indicated in red. Thus, as shown in FIG. 5, buttons 502 and 504 would be colored green and button 506 would be colored red. Information tray 402 may also display information such as weather and news
5 406.

Turning to FIG. 6, a graphical approach to displaying program information in buttons 306 of information area 206 is shown. As illustrated, buttons 306 include graphical elements such as logos and/or 10 trademarks for the programs identified by the buttons that may be used in addition to or instead of basic text. For example, button 604 contains the graphic logo "F·R·I·E·N·D·S" instead of the basic text "Friends". Similarly, button 606 contains the graphic 15 logo "SportsCenter" (wherein "Center" is in bold letters) instead of the basic text "SportsCenter" (wherein none of the letters are bold letters). Button 612 contains the graphic logo for "Home Improvement" wherein the words "Home Improvement" are incorporated 20 into a graphic representation of a house rather than simply being presented as ordinary text. By displaying buttons 306 with graphic logos and/or trademarks of the corresponding programs, viewers can more easily identify programs that are of interest to them. For 25 this reason, program providers may be willing to pay to have their programs presented as logos and/or trademarks in the program guide in addition to or instead of basic text.

Like buttons 306 with text content, buttons 30 306 with graphic content may have colored backgrounds to indicate to the viewer what type of program is showing. For example, "F·R·I·E·N·D·S" button 604 may have a yellow background to indicate that it

- 10 -

corresponds to a situation comedy (sitcom) or drama. "SportsCenter" button 606 may be colored green to indicate that it corresponds to sports related programming.

- 5 Buttons 306 may also indicate affiliation of programs and/or the program guide with an affiliated entity by providing graphical element affiliation indicators within the buttons. For example, buttons 306 may include one or more affiliation indicators to
10 indicate network affiliation (e.g., ABC, NBC, etc.), sports team affiliation (e.g., Green Bay Packers, Denver Broncos, New York Yankees, etc.), corporate affiliation (e.g., NFL, NASCAR, National Geographic, etc.), event affiliation (e.g., Super Bowl,
15 Daytona 500, Kentucky Derby, etc.), guide affiliation (e.g., TV Guide, etc.), etc. Affiliation indicators may indicate sponsorship of a program by a sponsor, or may indicate any other affiliation between an entity and a program.

- 20 FIG. 6 shows examples buttons 306 with affiliation indicators. Button 608 indicates a network affiliation of the program "News Channel 7" with the ABC Network, and button 610 indicates a corporate affiliation of the program "NFL's Greatest" with the
25 NFL. These are just two possible variations of including affiliation indicators in buttons 306. Other variations could include multiple affiliation indicators in the same button.

- Button 306 may also include graphical element
30 celebrity images as shown in FIG. 7. As illustrated, buttons 702, 704, and 706 have images of celebrities in the buttons. Celebrity images on these buttons help viewers identify programs because viewers associate

- 11 -

celebrity images with programs. Button 706, for instance, shows the faces of the cast members of the show "Party of Five." As is evident in FIG. 7, the sizes of buttons in the program guides of the present
5 may be any suitable size or shape and need not be of uniform size or shape. As is also evident in FIG. 7, especially from button 704, many features of the invention can be used in the same button. As illustrated, button 704 is a large button, and includes
10 a program logo, an affiliation indicator for a television network affiliation, an affiliation indicator for a corporate affiliation (possibly a sponsor), text information, and a celebrity image.

Other examples of celebrity images within
15 buttons are shown in FIG. 8. As can be seen, in button 802, a program logo, network affiliation indicator, and a celebrity image are all included. Alternatively, as shown in button 804, only a program logo and a celebrity image may be used. As yet another
20 alternative, a program logo may be positioned within a celebrity image as shown in button 806.

By providing logos, affiliation indicators, and celebrity images in buttons, the program guide of the present invention provides increased readability.
25 Because less time is spent reading the program listings, viewers can focus more time looking at other parts of the screen. This is particularly useful because this provides an incentive for companies to advertise in the program guide and/or sponsor programs
30 indicated in buttons 306. In order to provide more space for advertisements, bigger channel buttons may be implemented in the program guide.

- 12 -

Turning to FIG. 9, a large button 902 is shown. As illustrated, button 902 indicates that on the television program "Monday Night Football," the Denver Broncos are playing the Kansas City Chiefs. To 5 help the viewer quickly identify this football game, affiliation indicators 904, 906, and 908 are included in button 902. Indicator 904 indicates that this program is affiliated with the National Football League, and indicators 906 and 908 indicate the logos 10 of the Kansas City Chiefs and Denver Broncos, respectively.

As can also be seen in FIG. 9, button 902 is not of uniform shape in order to facilitate the inclusion of an advertising button 910. As shown, 15 button 910 includes a "Nike Swoosh" advertising element that may be used to advertise various sporting goods available from Nike, Inc. Because Nike provides sporting goods, including advertising button 910 with an advertising element near button 902, which shows 20 information for an athletic event, may be an effective advertising mechanism. Advertising elements may be used in any type of button, information tray, and/or any other portion of the electronic program guides.

Buttons 306 may also include promotional 25 slogans to indicate significant events. Slogans may include phrases such as "Final Episode," "Season Finale," or any other suitable phrase.

Turning to FIG. 10, two promotion 1002 and 1004 buttons that may also be used in the electronic 30 program guides of the present invention are shown. As illustrated, buttons 1002 and 1004 are not displayed with a corresponding channel indicator 308 like buttons 306. Because buttons 1002 and 1004 are not displayed

- 13 -

with a channel indicator 308, these buttons may be used to promote or advertise any event, goods, service, etc. irrespective of whether the event, goods, or service is related to a television program. Nevertheless, as shown, button 1002 is promoting a television program "Ally McBeal." Within button 1002 are a slogan "Don't miss Ally tonight!", a logo "Ally McBeal", an affiliation indicator "FOX", a celebrity image of Calista Flockhart, and text program information "7:00 on FOX". Promotion button 1004, as illustrated, is associated with button 1002, even though button 1004 may be completely independent of button 1002. Button 1004 comprises a affiliation indicator for "TV Guide Online", an text information "Find out more about Calista at TV Guide online", and a Uniform Resource Locator (URL) for "www.tvguide.com". By selecting the URL in button 1004 when the electronic program guide is implemented as an interactive television program guide or an online television program guide, the electronic program guide may present a web browser containing the corresponding web page.

Two other forms of promotion buttons are illustrated in FIGS. 11 and 12. As shown in FIG. 11, a promotion button 1102 may be used to promote an event such as the "Daytona 500". In conjunction with this promotion, button 1102 may also include a slogan "Winston Cup Series premier!", an affiliation indicator "TV Guide Channel", and text information "This Sunday!". An advertising button 1104 may also be used in conjunction with promotion button 1102. As shown, button 1104 shows the logo for "NASCAR" to advertise "NASCAR" auto racing. By placing advertising button

- 14 -

1104 near promotion button 1102, viewers are aware of the association of their content.

As shown in FIG. 12, a promotion button 1202 may be used to promote an event such as the "Holyfield 5 VS Lennox" boxing match as indicated by the text information "Holyfield VS Lennox". Also included in button 1202 is a celebrity image of the two fighters, and more text information indicating that the fight will be aired on "Sat, March 13" at "7:00 PM" and will 10 be "Live on Pay-Per-View".

The concepts shown and discussed in conjunction with the figures may be used in passive, interactive, and online guides. The arrangements of screen elements shown are merely illustrative. For 15 example, see United States Patent Application No. 09/357,941, filed July 16, 1999 and United States Patent Application No. 09/354,602, filed July 16, 1999, which are hereby incorporated by reference herein in their entirety, for examples of arrangements of 20 interactive program guides, and United States Patent Application No. 08/938,028, filed September 18, 1997, which is hereby incorporated by reference herein in its entirety, for examples of arrangements of elements in an online program guide. The screens used in 25 accordance with the present invention may or may not be partitioned into various sections containing, for example, program listings, video windows, advertisements, logos and screen titles, etc. Program listings may be in the form of a grid, a list sorted by 30 time, channel, category, alphabetically, or in any other format.

In the interactive embodiments, the guide may allow the user to highlight any individual item and

- 15 -

select it using a "Select", "Enter", "Ok", or similar key. In the online embodiments, the guide may allow the user to select any individual time by clicking on it using a mouse. Selectable items may include any
5 button, logo, indicator, text, icon, etc.

Selecting an item may cause the guide to perform an action (such as tuning to a program) related to the item, display additional information related to the item, display a menu of options related to the item
10 (e.g., watch, remind, lock, favorite, order, other air times, etc.), or other function.

The foregoing is merely illustrative of the principles of this invention and various modifications can be made by those skilled in the art without
15 departing from the scope and spirit of the invention.

- 16 -

What is Claimed is:

1. A method of presenting a electronic program guide, comprising:
receiving program guide data; and
presenting the program guide data as
5 program listings for a plurality of television programs such that at least one of the program listings include a graphical element for a corresponding one of the plurality of television programs.

2. The method of claim 1, wherein the graphical element is a logo for the corresponding one of the plurality of television programs.

3. The method of claim 1, wherein the graphical element is a celebrity image.

4. The method of claim 1, wherein the graphical element is an affiliation indicator.

5. The method of claim 4, wherein the affiliation indicator identifies a network affiliate.

6. The method of claim 4, wherein the affiliation indicator identifies a sports team affiliate.

7. The method of claim 4, wherein the affiliation indicator identifies a corporate affiliate.

8. The method of claim 4, wherein the affiliation indicator identifies an event affiliate.

- 17 -

9. The method of claim 4, wherein the affiliation indicator identifies a guide affiliate.

10. The method of claim 4, wherein the affiliation indicator identifies a sponsor.

11. The method of claim 1, further comprising presenting text information in at least one of the program listings.

12. The method of claim 1, further comprising presenting an informational icon in at least one of the program listings.

13. The method of claim 1, further comprising presenting an information tray with the program listings.

14. The method of claim 13, further comprising presenting a legend in the information tray.

15. The method of claim 13, further comprising presenting weather information in the information tray.

16. The method of claim 13, further comprising presenting news information in the information tray.

17. The method of claim 13, further comprising presenting an advertising element in the information tray.

- 18 -

18. The method of claim 1, further comprising presenting the program listings as buttons.

19. The method of claim 1, further comprising displaying a guide provider logo and presenting channel indicators which are similar in style to the guide provider logo.

20. The method of claim 1, further comprising displaying an advertisement within the program listings.

21. The method of claim 20, wherein the advertisement includes a logo for a television program.

22. The method of claim 20, wherein the advertisement includes a celebrity image.

23. The method of claim 20, wherein the advertisement includes an affiliation indicator.

24. The method of claim 1, further comprising displaying a promotion within the program listings.

25. The method of claim 24, wherein the promotion includes a logo for a television program.

26. The method of claim 24, wherein the promotion includes a celebrity image.

27. The method of claim 24, wherein the promotion includes an affiliation indicator.

- 19 -

28. The method of claim 1, wherein the electronic program guide is a passive television program guide.

29. The method of claim 1, wherein the electronic program guide is an interactive television program guide.

30. The method of claim 1, wherein the electronic program guide is an online television program guide.

31. The method of claim 1, wherein the program listings are organized in a grid.

32. The method of claim 1, wherein the program listings are organized in a list.

33. The method of claim 1, wherein the program listings are selectable.

34. A system for presenting a electronic program guide, comprising:

program guide provider equipment that receives program guide data; and

5 program guide display equipment that presents the program guide data as program listings for a plurality of television programs such that at least one of the program listings include a graphical element for a corresponding one of the plurality of television
10 programs.

- 20 -

35. The system of claim 34, wherein the graphical element is a logo for the corresponding one of the plurality of television programs.

36. The system of claim 34, wherein the graphical element is a celebrity image.

37. The system of claim 34, wherein the graphical element is an affiliation indicator.

38. The system of claim 37, wherein the affiliation indicator identifies a network affiliate.

39. The system of claim 37, wherein the affiliation indicator identifies a sports team affiliate.

40. The system of claim 37, wherein the affiliation indicator identifies a corporate affiliate.

41. The system of claim 37, wherein the affiliation indicator identifies an event affiliate.

42. The system of claim 37, wherein the affiliation indicator identifies a guide affiliate.

43. The system of claim 37, wherein the affiliation indicator identifies a sponsor.

44. The system of claim 34, wherein the program guide display equipment presents text information in at least one of the program listings.

- 21 -

45. The system of claim 34, wherein the program guide display equipment presents an informational icon in at least one of the program listings.

46. The system of claim 34, wherein the program guide display equipment presents an information tray with the program listings.

47. The system of claim 46, wherein the program guide display equipment presents a legend in the information tray.

48. The system of claim 46, wherein the program guide display equipment presents weather information in the information tray.

49. The system of claim 46, wherein the program guide display equipment presents news information in the information tray.

50. The system of claim 46, wherein the program guide display equipment presents an advertising element in the information tray.

51. The system of claim 34, wherein the program guide display equipment presents the program listings as buttons.

52. The system of claim 34, wherein the program guide display equipment displays a guide provider logo and presents channel indicators which are similar in style to the guide provider logo.

- 22 -

53. The system of claim 34, wherein the program guide display equipment displays an advertisement within the program listings.

54. The system of claim 53, wherein the advertisement includes a logo for a television program.

55. The system of claim 53, wherein the advertisement includes a celebrity image.

56. The system of claim 53, wherein the advertisement includes an affiliation indicator.

57. The system of claim 34, wherein the program guide display equipment displays a promotion within the program listings.

58. The system of claim 57, wherein the promotion includes a logo for a television program.

59. The system of claim 57, wherein the promotion includes a celebrity image.

60. The system of claim 57, wherein the promotion includes an affiliation indicator.

61. The system of claim 34, wherein the electronic program guide is a passive television program guide.

- 23 -

62.. The system of claim 34, wherein the electronic program guide is an interactive television program guide.

63. The system of claim 34, wherein the electronic program guide is an online television program guide.

64. The system of claim 34, wherein the program listings are organized in a grid.

65. The system of claim 34, wherein the program listings are organized in a list.

66. The system of claim 34, wherein the program listings are selectable.



1/12

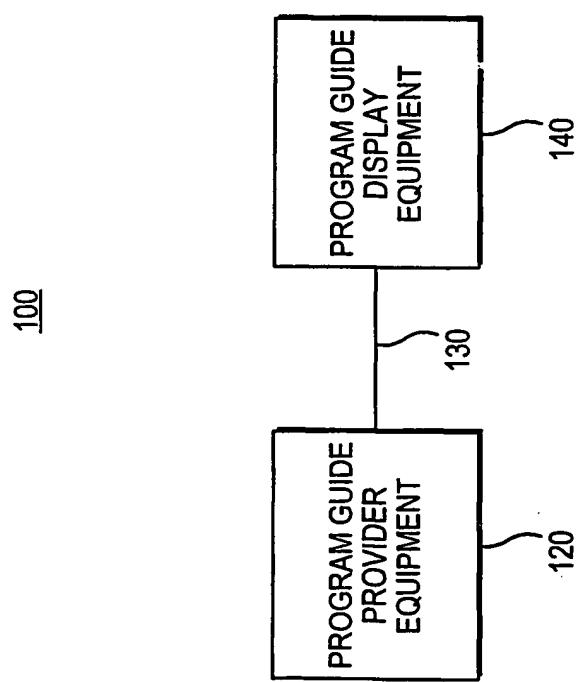


FIG. 1

2/12

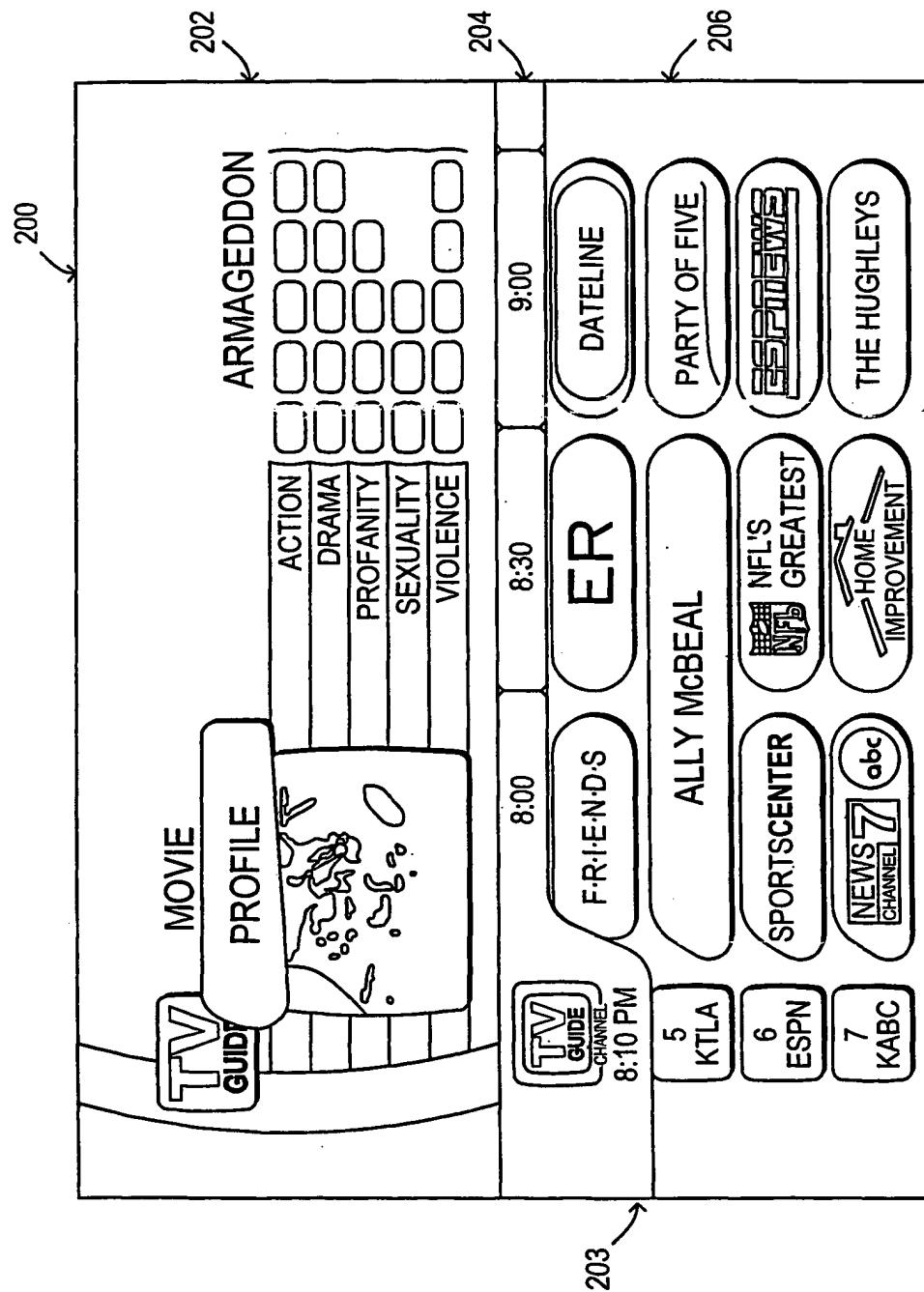


FIG. 2

3/12

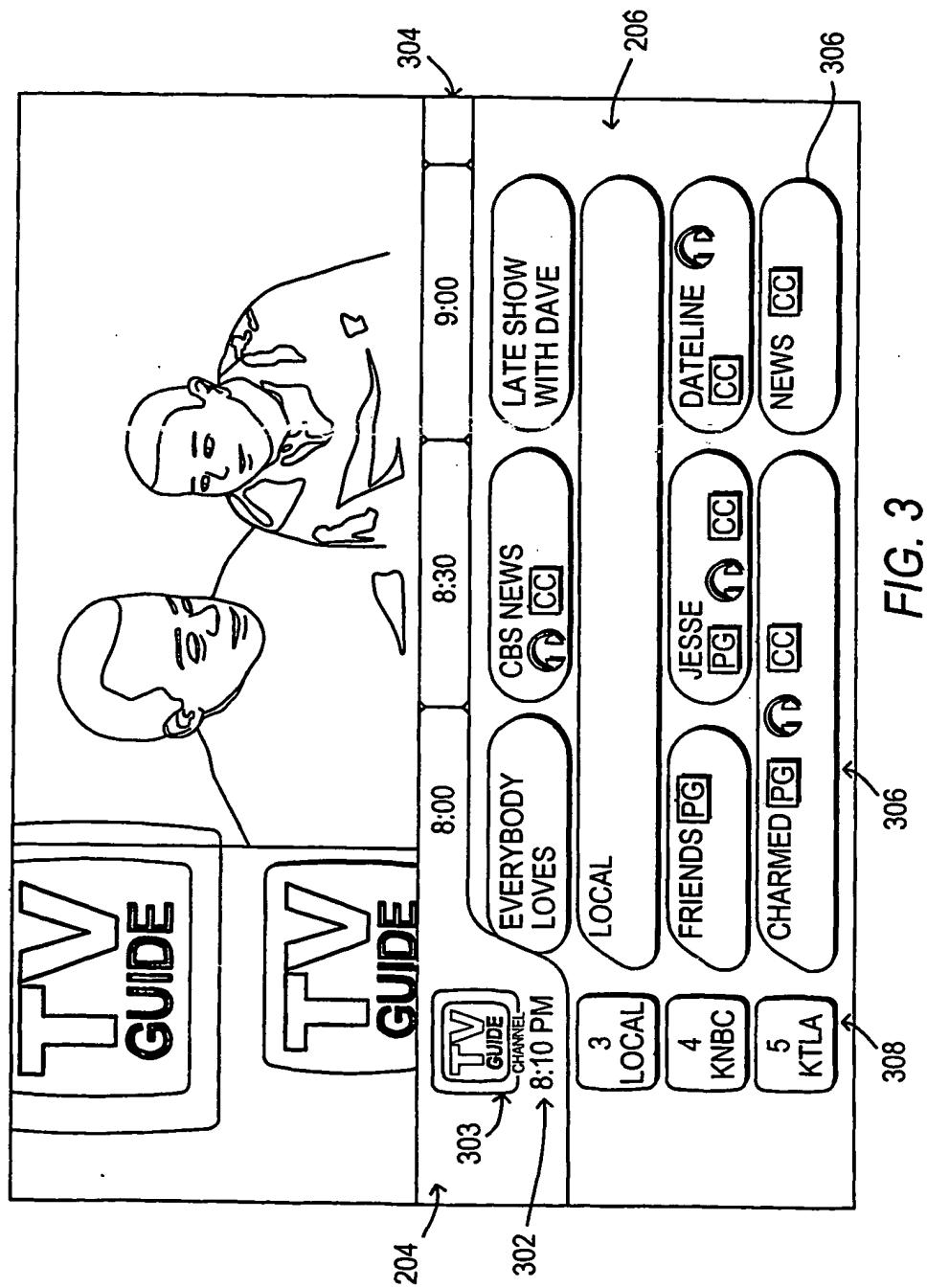


FIG. 3

4/12

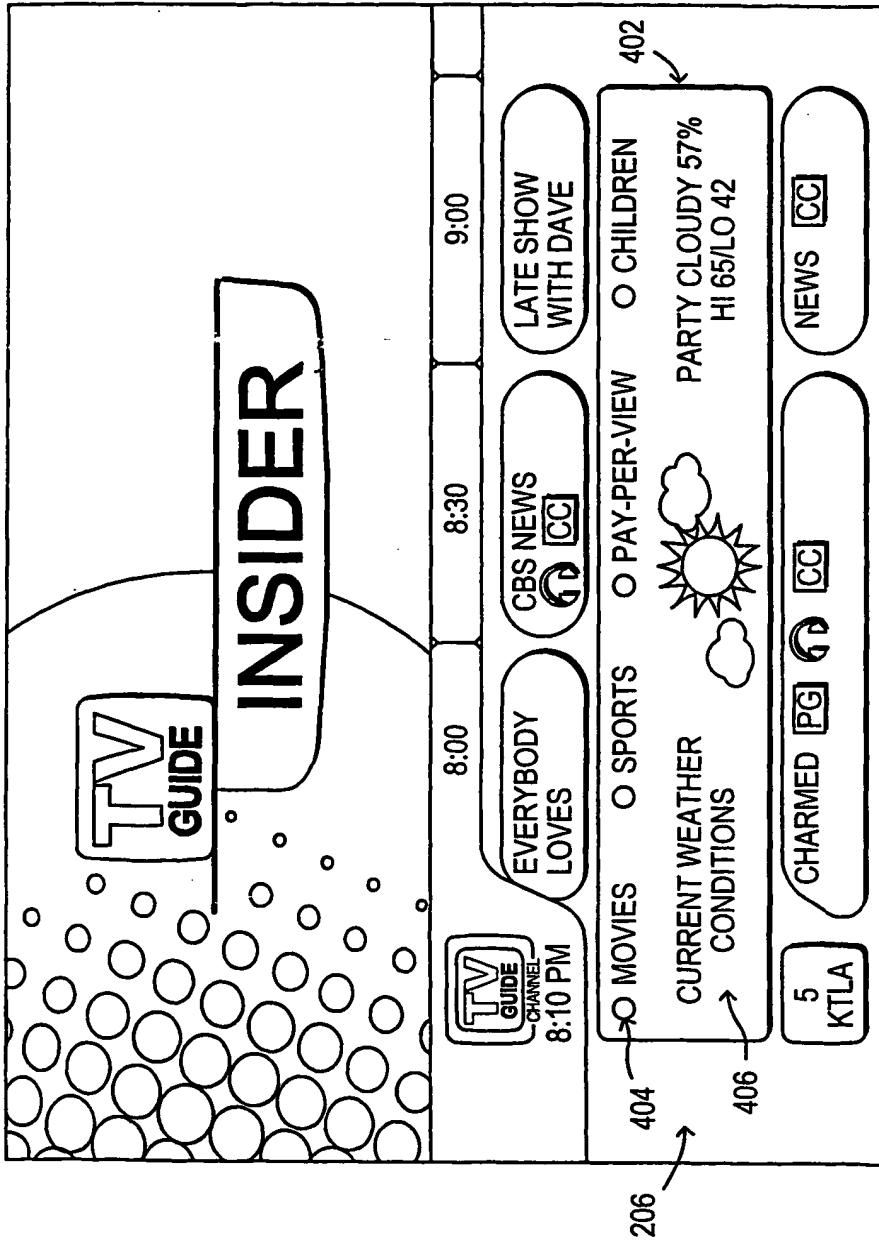


FIG. 4

5/12

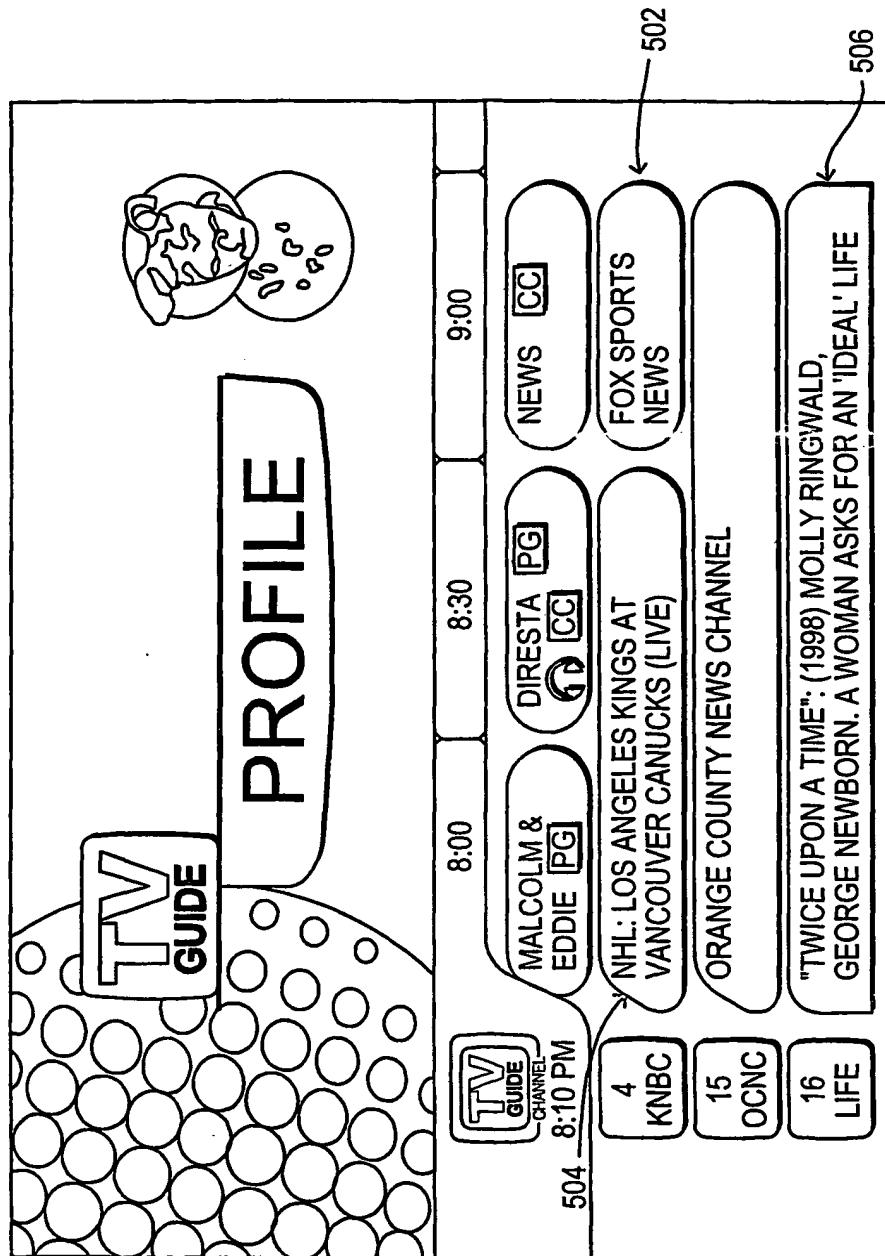
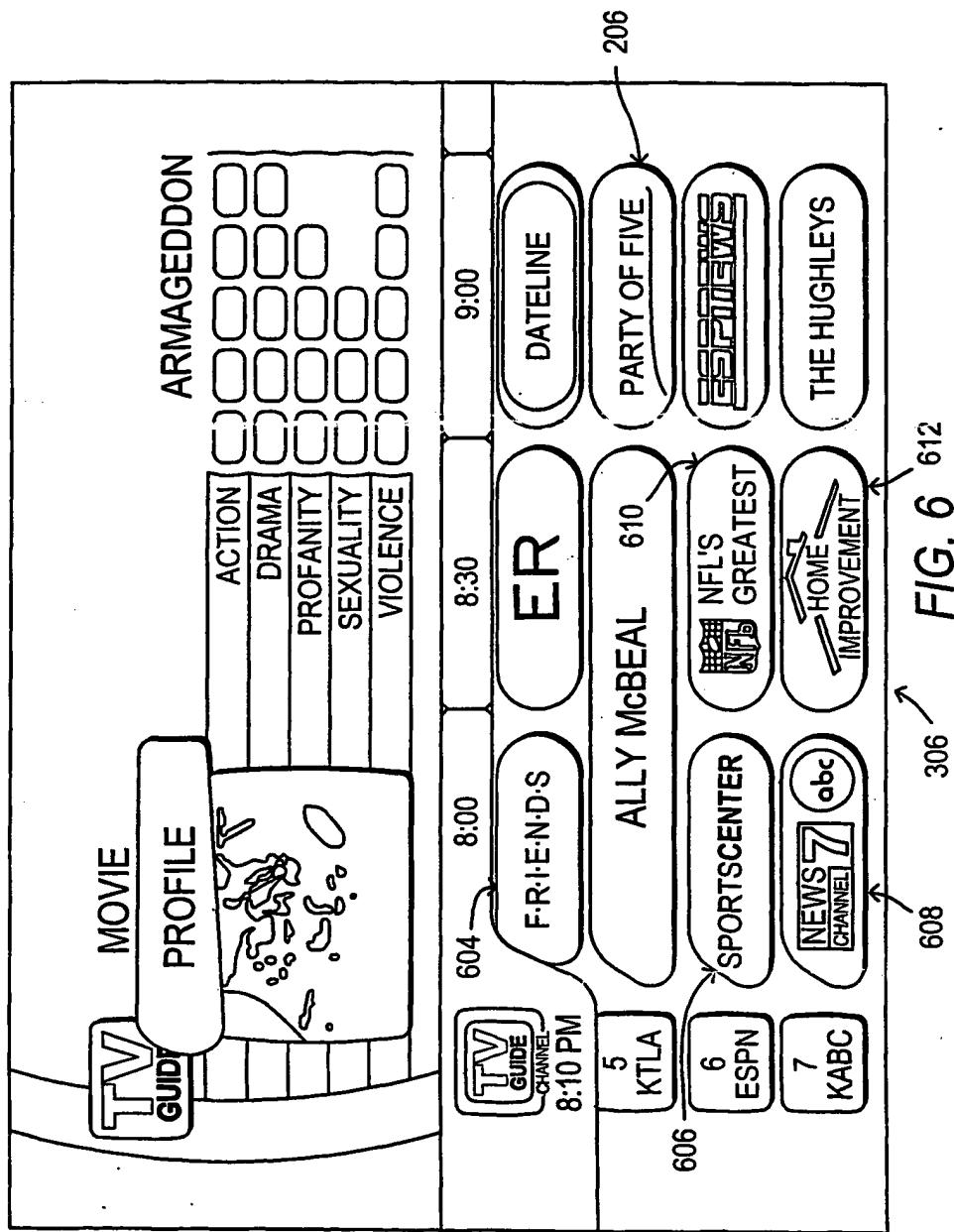


FIG. 5

6/12



7/12

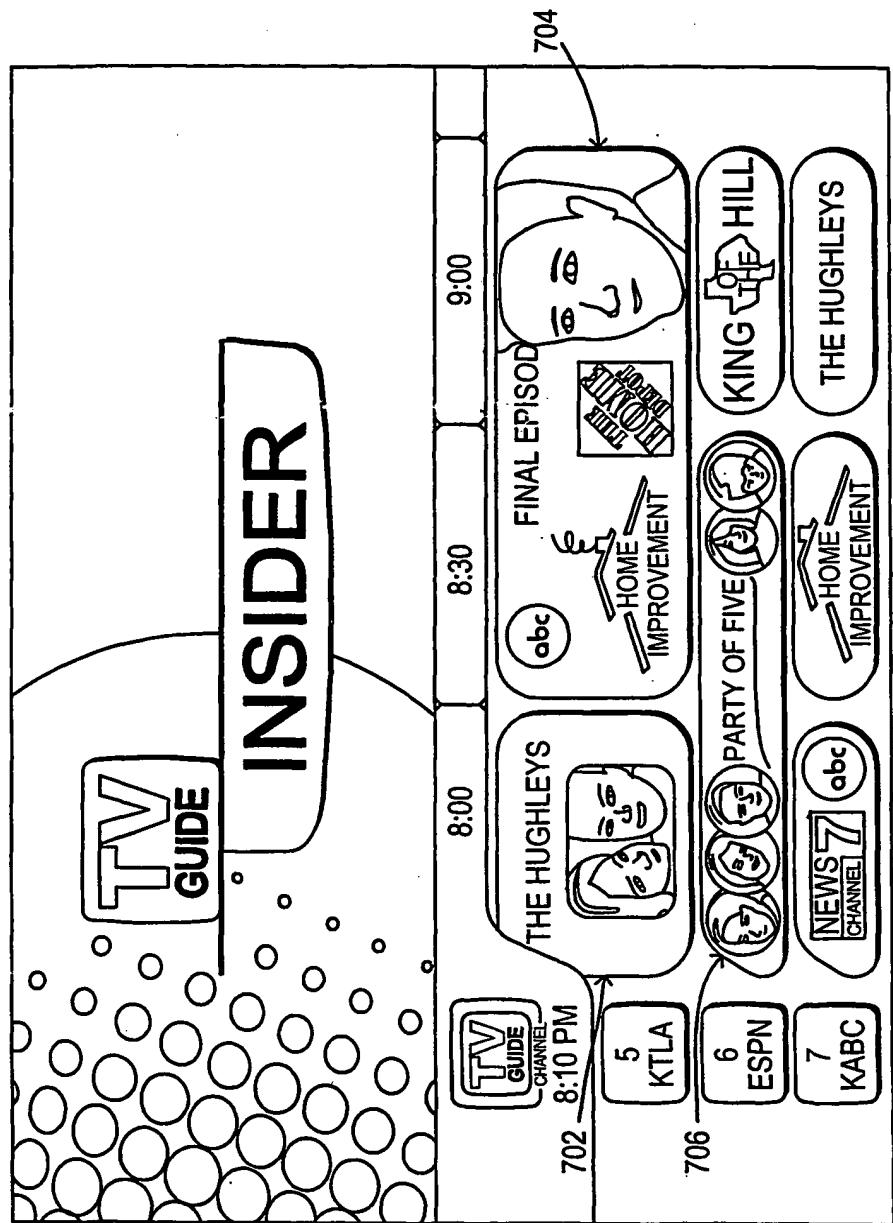


FIG. 7

8/12

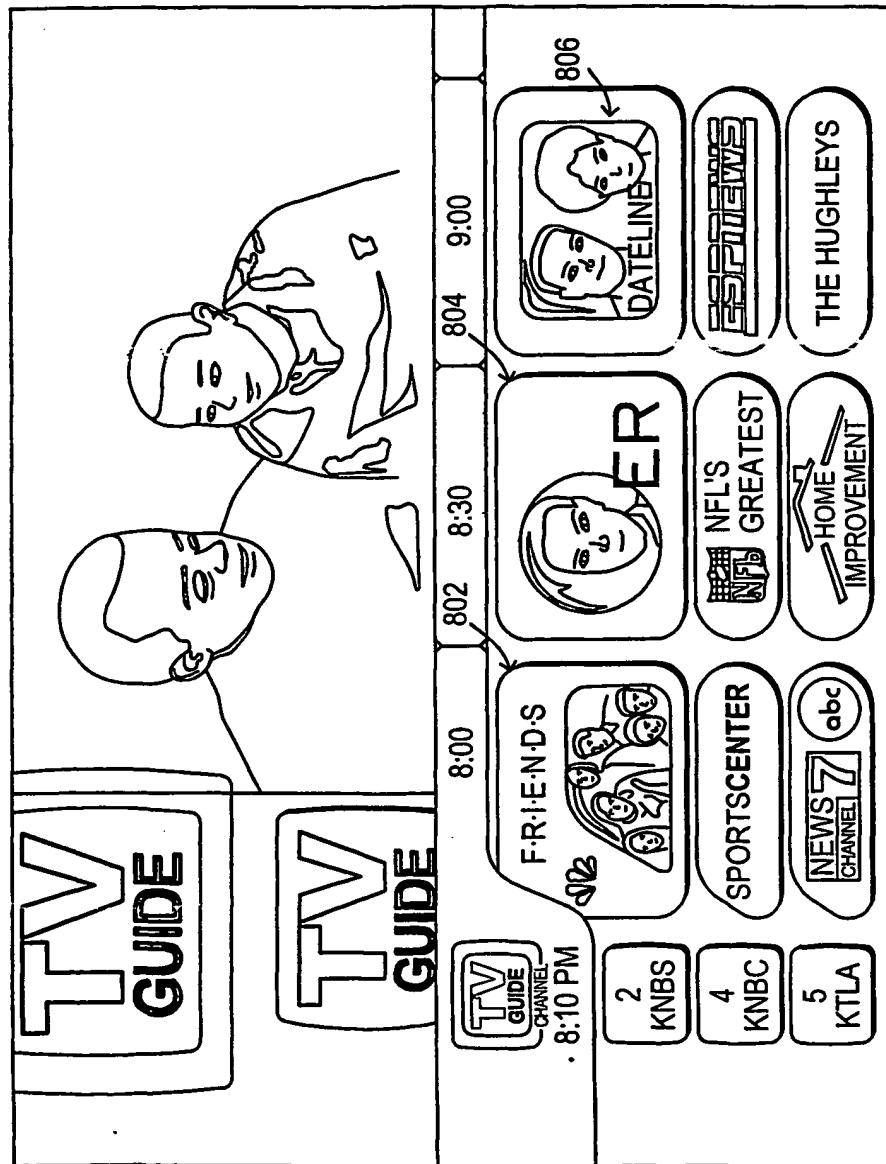


FIG. 8

9/12

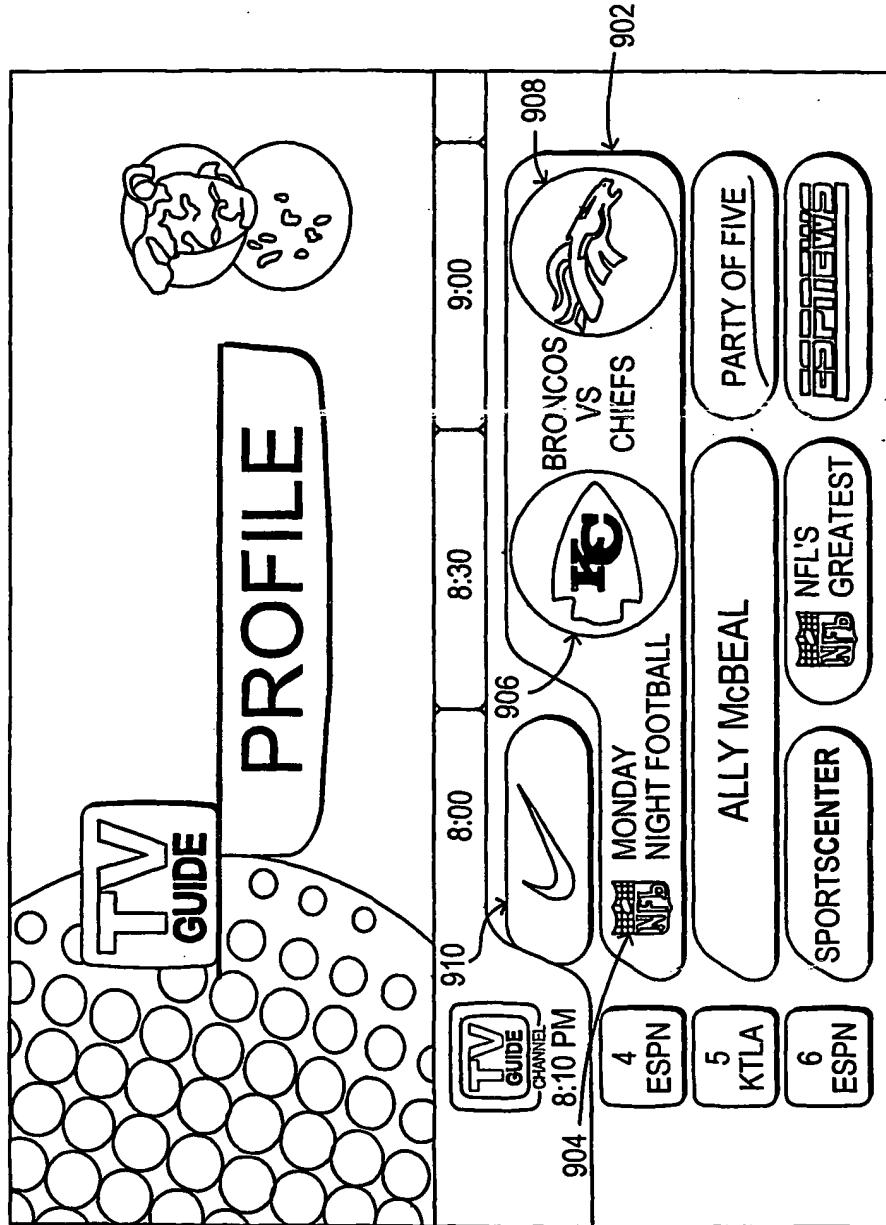


FIG. 9

10/12

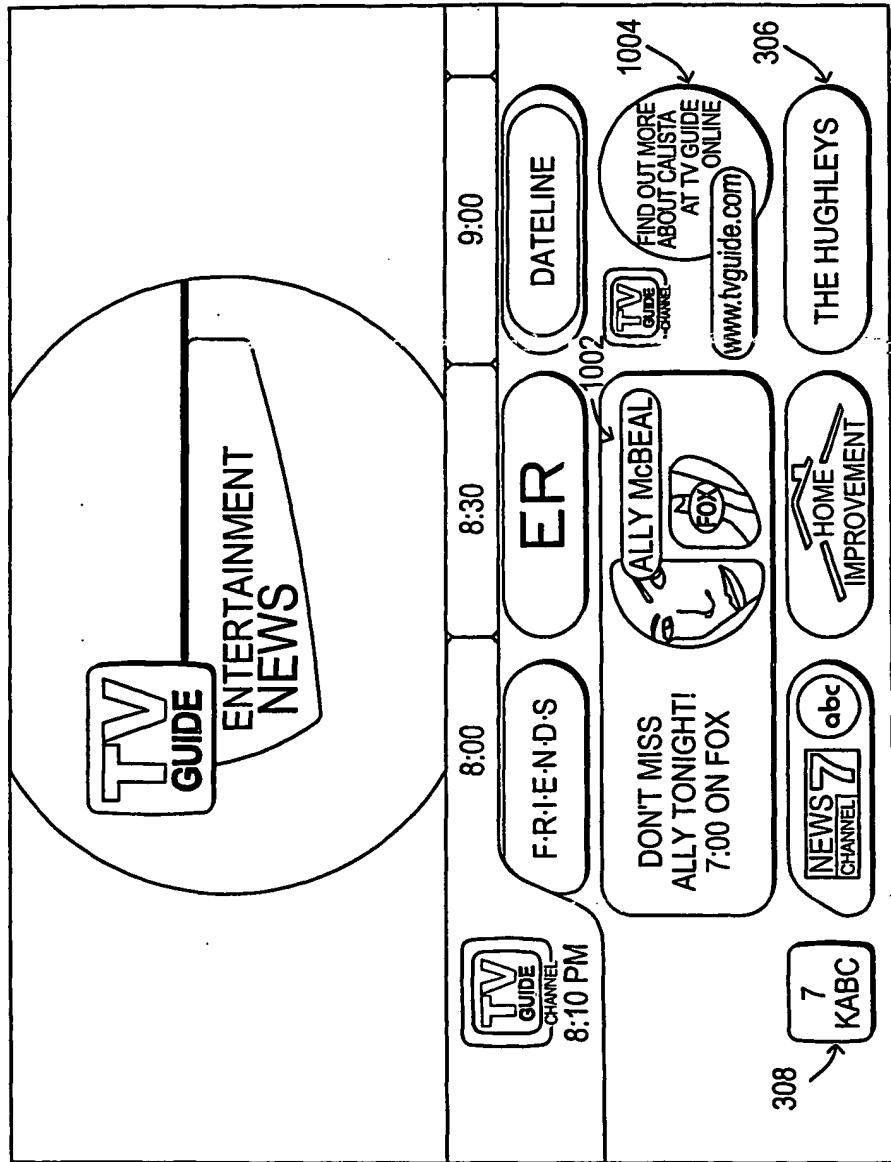


FIG. 10

11/12

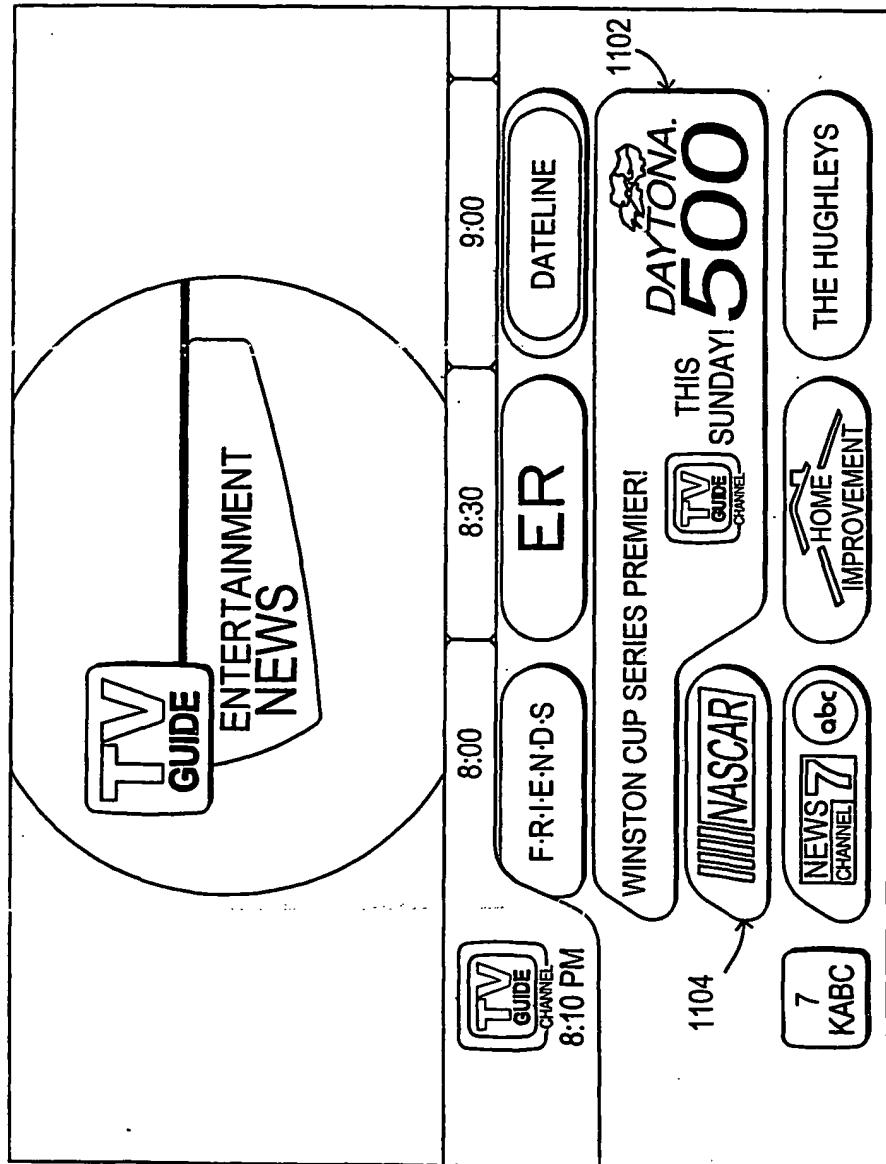


FIG. 11

12/12

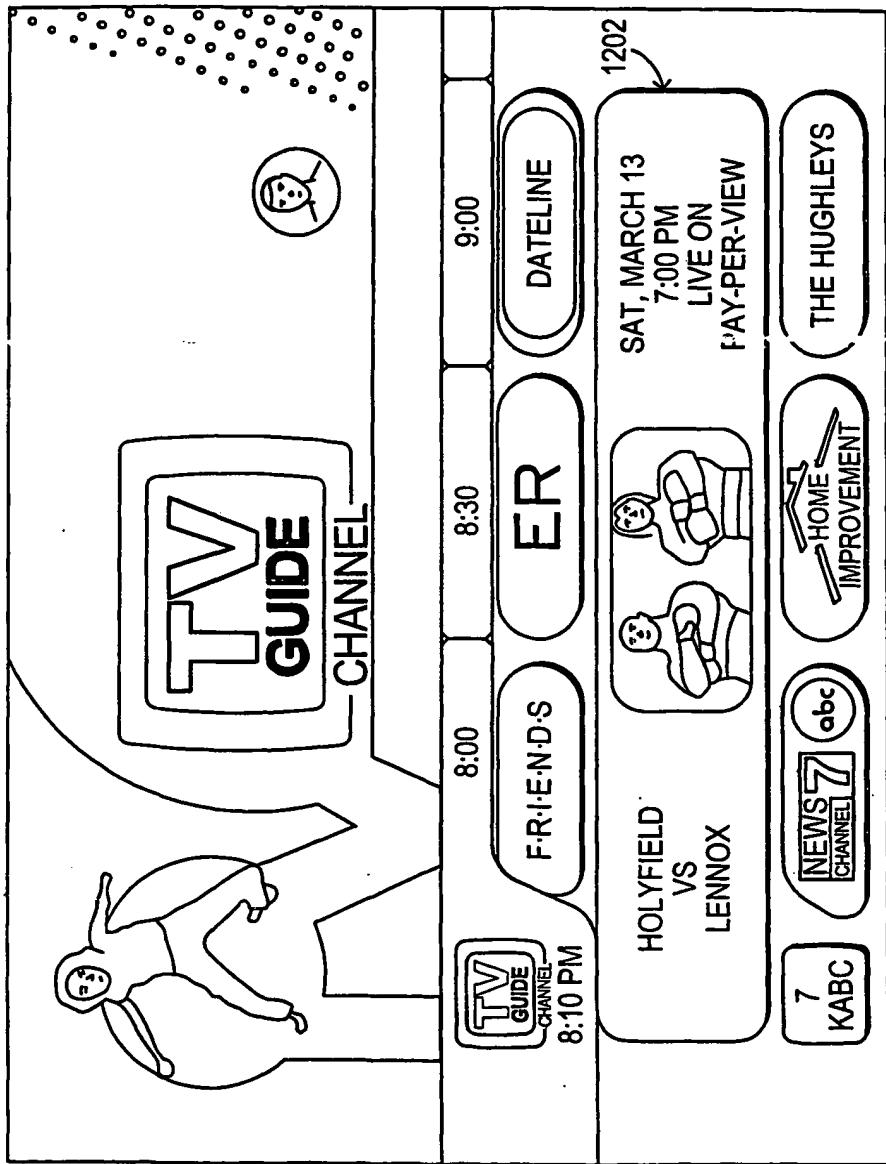


FIG. 12

INTERNATIONAL SEARCH REPORT

Intern	Application No
PCT/US 01/00308	

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04N5/445
--

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT
--

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 60783 A (UNITED VIDEO PROPERTIES INC) 25 November 1999 (1999-11-25)	1,2,4,5, 9,11,20, 24,28, 29, 31-35, 37,38, 42,44, 53,57, 61,62, 64-66
Y	page 12 -page 45	12,18, 30,45, 51,63
Y	WO 99 04561 A (SCHOAFF P CHRISTOPHER :ALEXANDER RON (US); GUIDE INC E (US); HANCO) 28 January 1999 (1999-01-28) page 3 -page 45	12,18, 30,45, 51,63

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document illustrating the general state of the art which is not considered to be of particular relevance
- "E" earlier document published on or after the international filing date
- "L" document which raises doubts on priority claim(s) or which establishes the publication date of another claimed invention for a given reason (as specified)
- "O" document referred to in oral disclosure, use, exhibition or other means
- "P" document posterior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the earliest completion of the International search

Date of mailing of the International search report

6 April 2001

20/04/2001

Name and number, address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Materne, A

INTERNATIONAL SEARCH REPORT

Inten
al Application No
PCT/US 01/00308

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 05, 31 May 1999 (1999-05-31) -& JP 11 032272 A (MICROSOFT CORP), 2 February 1999 (1999-02-02) abstract & US 6 141 003 A (CHOR ET AL.) 31 October 2000 (2000-10-31)	1,34
P,X		1,34
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 08, 30 June 1998 (1998-06-30) -& JP 10 065978 A (HITACHI LTD), 6 March 1998 (1998-03-06) abstract	1-66
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 12, 29 October 1999 (1999-10-29) -& JP 11 205711 A (SANYO ELECTRIC CO LTD), 30 July 1999 (1999-07-30) abstract	1-66
A	US 5 635 978 A (ALTEN JERRY ET AL) 3 June 1997 (1997-06-03) column 5, line 11 -column 15, line 20	1-66
A	WO 96 34467 A (WINK COMMUNICATIONS INC) 31 October 1996 (1996-10-31) page 5 -page 28	1-66

INTERNATIONAL SEARCH REPORT

Inten	Application No
PCT/US 01/00308	

Patent document cited in search report	Publication date	Patent family member(s)			Publication date
WO 9960783 A	25-11-1999	AU	4077699 A		06-12-1999
		BR	9910510 A		02-01-2001
		EP	1078516 A		28-02-2001
WO 9904561 A	28-01-1999	AU	8504898 A		10-02-1999
		BR	9812104 A		18-07-2000
		EP	1036466 A		20-09-2000
		US	6122011 A		19-09-2000
		US	6177931 B		23-01-2001
JP 11032272 A	02-02-1999	US	6141003 A		31-10-2000
		DE	19811910 A		24-09-1998
		FR	2762114 A		16-10-1998
		GB	2323489 A		23-09-1998
		GB	2342240 A		05-04-2000
		GB	2342241 A		05-04-2000
JP 10065978 A	06-03-1998	NONE			
JP 11205711 A	30-07-1999	NONE			
US 5635978 A	03-06-1997	US	5559548 A		24-09-1996
WO 9634467 A	31-10-1996	AU	5448296 A		18-11-1996
		CA	2219352 A		31-10-1996
		EP	0823156 A		11-02-1998
		JP	10509005 T		02-09-1998